## **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	78850	brine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:39
L2	1731617	silver or Ag	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:39
L3	12302	I1 and I2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:39
L4	1305	l1 same l2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:40
L5	876167	chloride	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:40
L6	1181	14 and 15	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:40
L7	415	I4 same I5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:40
L8	308483	recycl\$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:40
L9	78	17 and 18	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:41
L10	119906	carboxylate	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 06:21
L11	20	19 and 110	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 05:43
L12	7	("5139981").URPN.	USPAT	OR	ON	2006/03/07 05:46

## **EAST Search History**

L13	1	"4615806".PN.	USPAT; USOCR	OR	ON	2006/03/07 05:46
L14	14026	silver adj nitrate	USPAT	OR	ON	2006/03/07 05:47
L15	2265	I1 same I10	USPAT	OR	ON	2006/03/07 05:47
L16	90	114 and 115	USPAT	OR	ON	2006/03/07 05:47
L17	379	562/609.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 08:42
L18	2	i14 and i17	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 06:18
L19	4	"4440649".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 06:18
L20	68	l1 near10 l10	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 06:22
L21	16	12 and 120	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 06:25
L22	7	"0572113"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 06:54
L23	42	((carboxylate and (brine or solution)) and chloride and silver).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 07:31
L24	15	((carboxylate and (brine or solution)) and chloride and silver).clm.	US-PGPUB	OR	ON	2006/03/07 06:56
L25	2	"5139981".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 07:31
L26	711	562/607.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 08:42
L27	7	114 and 126	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/07 08:42

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NEWS 7 DEC 21
                 IPC search and display fields enhanced in CA/CAplus with the
                 IPC reform
NEWS 8
        DEC 23
                 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
                 USPAT2
                 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 9
        JAN 13
NEWS 10
                 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
        JAN 13
                 INPADOC
NEWS 11
        JAN 17
                 Pre-1988 INPI data added to MARPAT
NEWS 12
        JAN 17
                 IPC 8 in the WPI family of databases including WPIFV
NEWS 13
        JAN 30
                 Saved answer limit increased
NEWS 14
        JAN 31
                 Monthly current-awareness alert (SDI) frequency
                 added to TULSA
NEWS 15
        FEB 21
                 STN AnaVist, Version 1.1, lets you share your STN AnaVist
                 visualization results
NEWS 16
        FEB 22
                 Status of current WO (PCT) information on STN
NEWS 17
                 The IPC thesaurus added to additional patent databases on STN
        FEB 22
                 Updates in EPFULL; IPC 8 enhancements added
NEWS 18 FEB 22
NEWS 19
        FEB 27
                 New STN AnaVist pricing effective March 1, 2006
NEWS 20 FEB 28
                MEDLINE/LMEDLINE reload improves functionality
NEWS 21
        FEB 28
                 TOXCENTER reloaded with enhancements
                 REGISTRY/ZREGISTRY enhanced with more experimental spectral
NEWS 22
        FEB 28
                 property data
NEWS 23
        MAR 01
                 INSPEC reloaded and enhanced
                 Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 24
        MAR 03
NEWS EXPRESS
             FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
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Structure search iteration limits have been increased. See HELP SLIMITS for details.

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http://www.cas.org/ONLINE/UG/regprops.html

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=> e cesium formate/cn
                   CESIUM FLUOZIRCONATE(IV)/CN
E1
             1
                   CESIUM FORMANILIDE/CN
E2
             1
             1 --> CESIUM FORMATE/CN
E3
                  CESIUM FORMATE (1:2)/CN
E4
             1
                  CESIUM FORMATE, CESIUM DERIV./CN
E5
             1
                  CESIUM FULLERENE/CN
E6
             1
                  CESIUM FULLERENE (CS3C60)/CN
E7
             1
                  CESIUM FULLERENE (CSC60)/CN
E8
             1
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E10
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                 CESIUM FULLERIDE (C60CS)/CN
E11
             1
                  CESIUM FULLERIDE (CS0.6C60)/CN
E12
             1
=> e3
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=> d l1

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN Ь1 3495-36-1 REGISTRY RN ED Entered STN: 16 Nov 1984 (CA INDEX NAME) Formic acid, cesium salt (8CI, 9CI) CN OTHER CA INDEX NAMES: CN Cesium formate (7CI) C H2 O2 . Cs MF BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CBNB, LC STN Files: CHEMCATS, CHEMLIST, CIN, CSCHEM, DETHERM\*, GMELIN\*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, PROMT, TOXCENTER, TULSA, USPAT2, USPATFULL (\*File contains numerically searchable property data) Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\* (\*\*Enter CHEMLIST File for up-to-date regulatory information) CRN (64-18-6)

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155 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
156 REFERENCES IN FILE CAPLUS (1907 TO DATE)

5 REFERENCES IN FILE CAOLD (PRIOR TO 1967.)

=> file caplus
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=> 11 L2 156 L1

=> silver or Ag

127 SILVERS 307345 SILVER (SILVER OR SILVERS) 307946 AG 4922 AGS 311359 AG (AG OR AGS) L3 440609 SILVER OR AG => 12 and 13 4 L2 AND L3 L4=> d 14 1-4 ti ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN **L4** Removal of chloride ion contaminant from alkali metal carboxylate drilling TТ fluid brines by treatment with silver nitrate and removal of silver chloride ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN **L4** Heavy liquids based on Cs or Rb salts for gravity separation of coal, ΤI minerals, and/or ores ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN L4Computer estimation of heat and free energy of formation for simple TIinorganic compounds ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN L4Action of carbon monoxide on cesium hydroxide (synthesis of cesium ΤI formate) => d 14 1-4 ti fbib abs ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN Removal of chloride ion contaminant from alkali metal carboxylate drilling TI fluid brines by treatment with silver nitrate and removal of silver chloride 2004:41427 CAPLUS ANDN 140:96598 Removal of chloride ion contaminant from alkali metal carboxylate drilling ΤI fluid brines by treatment with silver nitrate and removal of silver chloride Murray, James; Tobin, Edmund Austin; Warren, Stephen Geoffrey IN Johnson Matthey Public Limited Company, UK; Aubin Limited PΑ SO PCT Int. Appl., 9 pp. CODEN: PIXXD2 DT Patent LA English FAN.CNT 1 APPLICATION NO. KIND DATE DATE PATENT NO. \_\_\_\_\_ -----\_ \_ \_ \_ WO 2003-GB2843 20030702 A2 20040115 PΙ WO 2004005234 A3 WO 2004005234 20050506 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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US 2006009649
                    A1
                          20060112
                                     US 2005-520226
                                                            20050817
                                     GB 2002-15384
                                                         A 20020704
                                     WO 2003-GB2843
                                                         W 20030702
Alkali metal carboxylate salt brines, such as cesium and/or potassium
formate brine, are used in oil and gas drilling procedures and the
contamination with chloride ions can be controlled by treatment with a
silver nitrate solution, and removing the formed silver
chloride. High-d. brines can thus be obtained which are suitable for
reuse.
ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
Heavy liquids based on Cs or Rb salts for gravity separation of coal,
minerals, and/or ores
2000:421355 CAPLUS
133:46432
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- L4
- TI
- AN
- DN

AB

- ΤI Heavy liquids based on Cs or Rb salts for gravity separation of coal, minerals, and/or ores
- Young, Tom L.; Bauer, Kathy; Greene, Michael G.; Young, Sharon K. IN
- PΑ Versitech, Inc., USA
- PCT Int. Appl., 14 pp. SO CODEN: PIXXD2
- DТ Patent
- LA English
- FAN.CNT 1

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	PATENT NO.				KIND DATE			APPLICATION NO.					DATE					
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ΡI	WO	2000	0361	65		A2		2000	0622	1	WO 1	999-1	US30	194		1	9991	216
	WO 2000036165			A3 20021003														
		W:	ΑE,	AL,	AU,	BA,	BB,	BG,	BR,	CA,	CN,	CR,	CU,	CZ,	DM,	EE,	GD,	GE,
			HR,	HU,	ID,	IL,	IN,	IS,	JP,	KP,	KR,	LC,	LK,	LR,	LT,	LV,	MA,	MG,
			MK,	MN,	MX,	NO,	NZ,	PL,	RO,	SG,	SI,	SK,	SL,	TR,	TT,	TZ,	UA,	UΖ,
			VN,	YU,	ZA,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM				
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
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										1	US 1	998-	1125	50P	1	P 1	9981	216
										1	WO 1	999-1	US30:	194	1	W 1	9991	216

The non-toxic high-d. liqs. and slurries based on the Cs or Rb salts are AB suitable for separation of ores with recovery of minerals by the sink-float method. The Cs salts are typically selected from formate, tungstate, molybdate, or uranate, and the aqueous salt solution is optionally modified with

powdered ferrosilicon or WC for the preparation of high-d. slurry. The high-d. aqueous solns. typically have low viscosity for the rapid sink-float separation of

powdered target minerals from the ore feed milled to the particle size of 150-1700 μm. The aqueous Cs formate with the sp. gr. of 2.337 ia suitable for rapid separation of coal, graphite, and similar low-d. minerals, and the aqueous Cs tungstate with sp. gr. of 3.013 is effective for separation of SiO2-rich

gangue from sulfide mineral values.

- L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Computer estimation of heat and free energy of formation for simple inorganic compounds
- AN 1963:445341 CAPLUS
- DN 59:45341
- OREF 59:8190e-g
- TI Computer estimation of heat and free energy of formation for simple inorganic compounds
- AU Wilcox, D. E.; Bromley, L. A.
- CS Univ. of California, Berkeley
- SO Journal of Industrial and Engineering Chemistry (Washington, D. C.) (1963), 55(7), 32-9
  CODEN: JIECAD; ISSN: 0095-9014
- DT Journal
- LA Unavailable
- AB Heats and free energies of formation of inorg. compds. are correlated by equations of the form, -ΔHf = nAB(XB XA)2 +nAYA + nBYB + nAB(WA/WB), where subscripts A and B refer to the cation and the anion, resp., nAB is the apparent number of single bonds, nA and nB are the nos. of atoms of A and B in the mol., and X, Y, and W are parameters determined from exptl. data. The equation for -ΔFf is identical in form. The average deviation of calculated from exptl. values of -ΔHf for 611 compds. was 1.51-1.98 and of -ΔFf for 270 compds., 1.57 kcal./mol. Estimated values of -ΔHf for 475 compds., with an estimated uncertainty of 15 kcal./mol, are tabulated.
- L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN
- TI Action of carbon monoxide on cesium hydroxide (synthesis of cesium formate)
- AN 1949:10368 CAPLUS
- DN 43:10368
- OREF 43:2109i,2110a
- TI Action of carbon monoxide on cesium hydroxide (synthesis of cesium formate)
- AU Hackspill, Louis; Thomas, Georges
- SO Compt. rend. (1948), 227, 797-9
- DT Journal
- LA Unavailable
- AB A Ag U-tube 25 cm. high, one side 2 cm. in diameter, the other 0.5 cm. and wound for electric heating, is used as a reaction vessel. The larger side contains 0.5 + 0.5-cm. Ag Raschig rings.

  Place 10 g. CsOH (m. 272°) in the larger side, and heat to 280-300°. Pass 5 l. pure CO into the smaller side over a 1-hr. period. The temperature may rise 10-20°. Yield about 90%. If the initial temperature is above 300°, Cs2C2O4 is formed.

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
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